



**Topic**

HEALTH-2007-2.1.1-2: "Molecular epidemiological studies in existing well characterised European (and/or other) population cohorts".

**Funding Scheme**

Collaborative Project (Large -scale focused research project)

**Project coordinator**

University of Milano

**Project Duration**

February 2008 - December 2011



HYPERGENES is a Collaborative Project funded in the first HEALTH call of the Seventh EU Framework Programme (FP7). The aim of HYPERGENES integrated approach is to develop an exhaustive model to disentangle the genetic bases of a complex disease (hypertension) using population genetic epidemiology as a methodological tool.

	<b>IT</b>	<b>UNI</b>
<b>University of Milano</b>		
Katholieke Universiteit Leuven	BE	UNI
Jagiellonian University Medical College	PO	UNI
IBM Israel	IS	LC
STMICROELECTRONICS SRL	IT	LC
<b>Softeco Sismat S.p.A</b>	<b>IT</b>	<b>SME</b>
REFORM E.C.	SL	SME
Pharnext S.A.S.	FR	SME
IMS Istituto di Management Sanitario S.r.l.	IT	SME
Siberian Branch of Russian Academy of Medical Sciences	RU	RC
Imperial College of Science, Technology and Medicine	UK	UNI
INSERM Institut National de la Santé et de la Recherche Médicale	FR	RC
University of Warwick	UK	UNI
University of Sassari	IT	UNI
University of Lausanne	CH	UNI
Medical University of Gdansk	PO	UNI
University of Padova	IT	UNI
Charles University in Prague	CZ	UNI
Shanghai Institute of Hypertension	RC	UNI

Established in 1979, Softeco Sismat S.p.A. is a leading company in the Information and Communication Technology market.

**In your opinion, what elements contributed most to the success of your proposal?**

**1. Cooperation among Large, Small and Medium enterprises and Academia**

**Prof. Daniele Cusi (University of Milano):** One of the main success factors in HYPERGENES is the synergistic approach among different research visions. Since the preparatory phases of the project, we took advantage of a public-private partnership in the definition of our objectives. STMICROELECTRONICS is one of the world's largest semiconductor companies. Its contribution to the project activity is based on exploitation of registered licenses and will lead to the realisation of fast and low cost tools suitable to carry out a rapid diagnostic test on hypertension. Moreover, 3 high-tech SMEs have been involved in the project, providing unique customised solutions in the elaboration of scientific data and in the managing of R&D activities which will be carried out during the project. We strongly emphasise the positive industrial-driven vision of such an approach.

**Enrico Morten, Softeco Sismat SpA (IT) :** "the participation in the Hypergenes project provided the SMEs with relevant market opportunities, as well as opportunities to acquire new strategic skills and knowledge in the bioinformatics area. They brought into the project the dynamic and open approach which is typical of SMEs"

**2. The role of the International Scientific Advisory Board**

Prof. Daniele Cusi (University of Milano): The scientific excellence of the project is granted by an International Scientific Advisory Board responsible to monitor all the phases of HYPERGENES and to support the consortium with advice on the overall scientific strategy of the project. The project coordinator, University of Milano, is also partner of InGenious HyperCare Network of Excellence (which groups the leading edge academia on hypertension studies in Europe). Some of the clinical members of the consortium are also partners in this NOE. Following the advices of the Project Officer, the Scientific Board has been re-shaped, broadening its European dimension: top-level universities from the USA, such as Prof. Luigi L. Cavalli Sforza (Stanford University) and Prof. Allen

W. Cowley (Medical College of Wisconsin), are now members of the International Scientific Advisory Board.

**3. The role of the Independent Ethical Steering Group.**

**Prof. Daniele Cusi (University of Milano):** Considering that the HYPERGENES Project is based on the genotyping of 12.000 DNA samples of already collected cohorts, ethical issues are indeed crucial. Even though all ethical issues were in principle initially solved by the fact that DNA had already been collected following the current legislation in each partner's country, HYPERGENES decided to have a dedicated internal, independent Ethical Review Board (Ethical Steering Group) to take care of all the ethical issues which will be addressed during project implementation. In fact, the HYPERGENES project may raise ethical issues related to the privacy and the confidentiality of patients, as genetic and personal information are handled by the researchers. However, all personal data are protected by appropriate coding that makes it impossible to re-construct the original identity of the DNA donor.